

Amendments to the Claims

The listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended). Combustion bowl (4, 4', 12, 16, 18-22) in the crown (1, 13) of a piston (2, 2', 14) for a diesel engine,

- having a ring-shaped cooling channel (9) disposed in the radially outer edge region of the piston (2, 2', 14) on the piston crown side,
- whereby the combustion bowl (4, 12, 16, 18-22) as well as its bowl neck (5, 11, 26) ~~are~~ disposed outside of the center relative to the longitudinal piston axis (3),

wherein

- an undercut (8, 8', 38), which extends radially outward and non-uniformly relative to the bowl neck (5, 11, 26) toward the cooling channel (9), is formed into at least a part of the radially outer edge region of the combustion bowl (4, 12, 16, 18-22), to such an extent that the entire radially outer edge region of the combustion bowl (4, 12, 16, 18-22) is disposed

sufficiently close to the cooling channel (9) for a cooling effect of the cooling channel (9) on the combustion bowl (4, 12, 16, 18-22).

Claim 2 (Previously Presented): Combustion bowl (4, 12, 16, 18-22) according to claim 1, comprising a circle-shaped bowl neck (5, 26).

Claim 3 (Previously Presented): Combustion bowl (4') according to claim 1, comprising an ovaly shaped bowl neck (11).

Claim 4 (Previously Presented): Combustion bowl according to claim 1, wherein a molded-on part (17) configured in hump-like manner is disposed in the center of the crown of the combustion bowl (16).

Claim 5 (Previously Presented): Combustion bowl (12, 16, 20, 21, 22) according to claim 1, comprising at least one radially outer edge region with undercut and at least one radially outer edge region (15, 25, 25', 29, 33) without undercut.

Claim 6 (Previously Presented): Combustion bowl (18 to 20) according to claim 1, comprising two regions (23, 24, 27, 28)

shaped essentially like a circle segment, which lie opposite one another.

Claim 7 (Previously Presented): Combustion bowl (21, 22) according to claim 1, comprising more than two regions (30-32, 34-36) shaped like a circle segment.

Claim 8 (Previously Presented): Combustion bowl (18-22) according to claim 6, wherein the regions (23, 24, 27, 28, 30-32, 34-36) shaped like a circle segment are machined with a transition into one another.

Claim 9 (Previously Presented): Combustion bowl (4, 12, 16, 18-22) according to claim 1, wherein fuel is injected into the combustion bowl (4, 12, 16, 18-22) by way of injection nozzles, the bores of which are dimensioned and disposed in such a manner that the width and the orientation of the fuel jets are adapted to the local expanses of the related bowl regions.